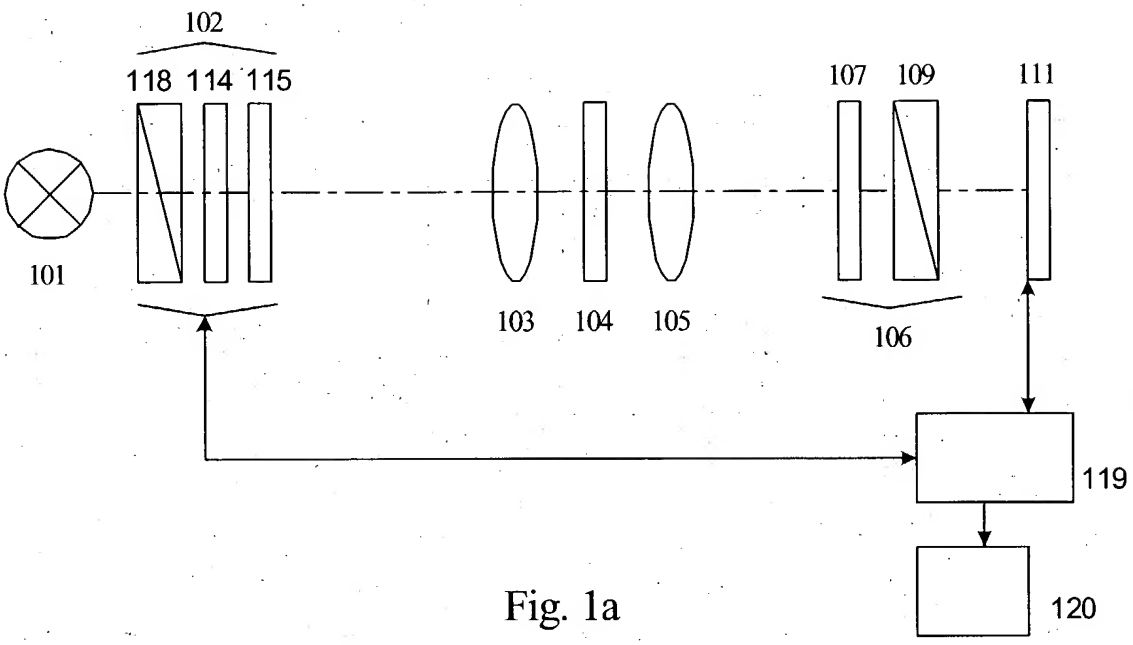
102
118 114 115
107 109 111
101
103 104 105
106
119
120

Fig. 1a

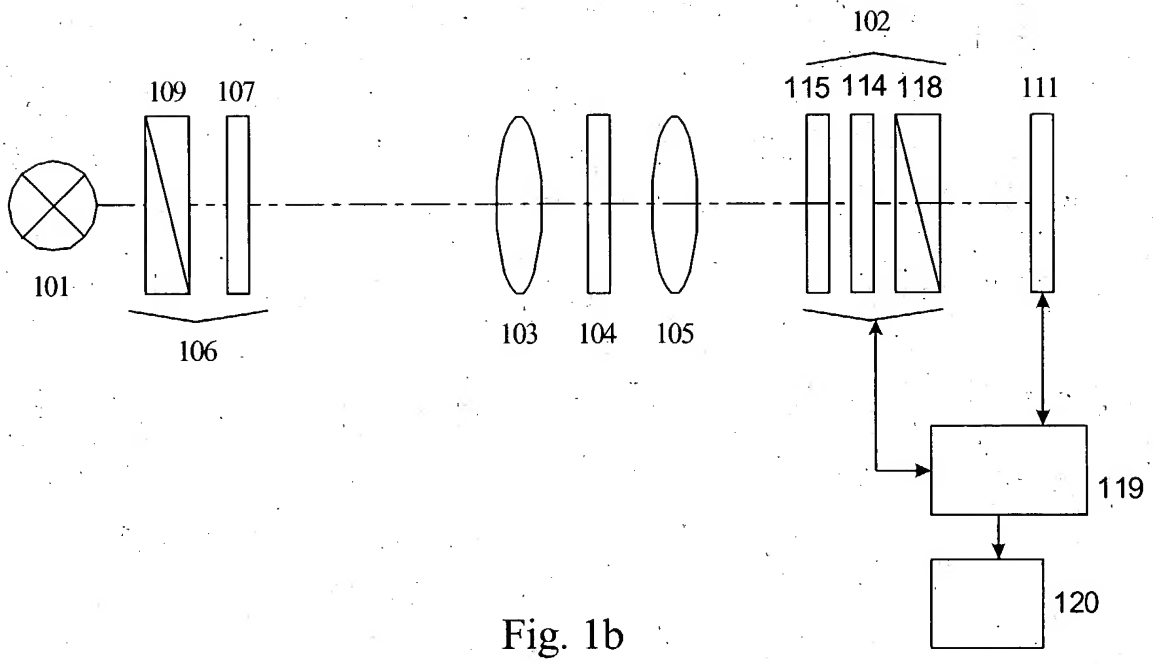
102
109 107
115 114 118
111
101
106
103 104 105
119
120

Fig. 1b

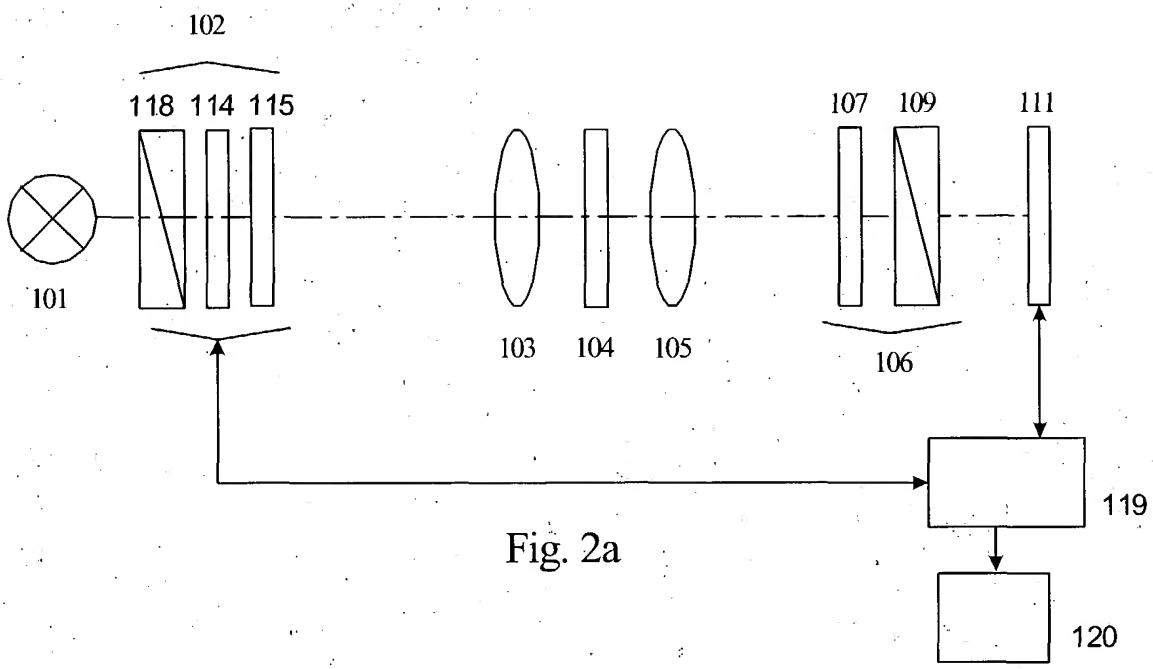
102
118 114 115
107 109 111
101
103 104 105
106
119
120

Fig. 2a

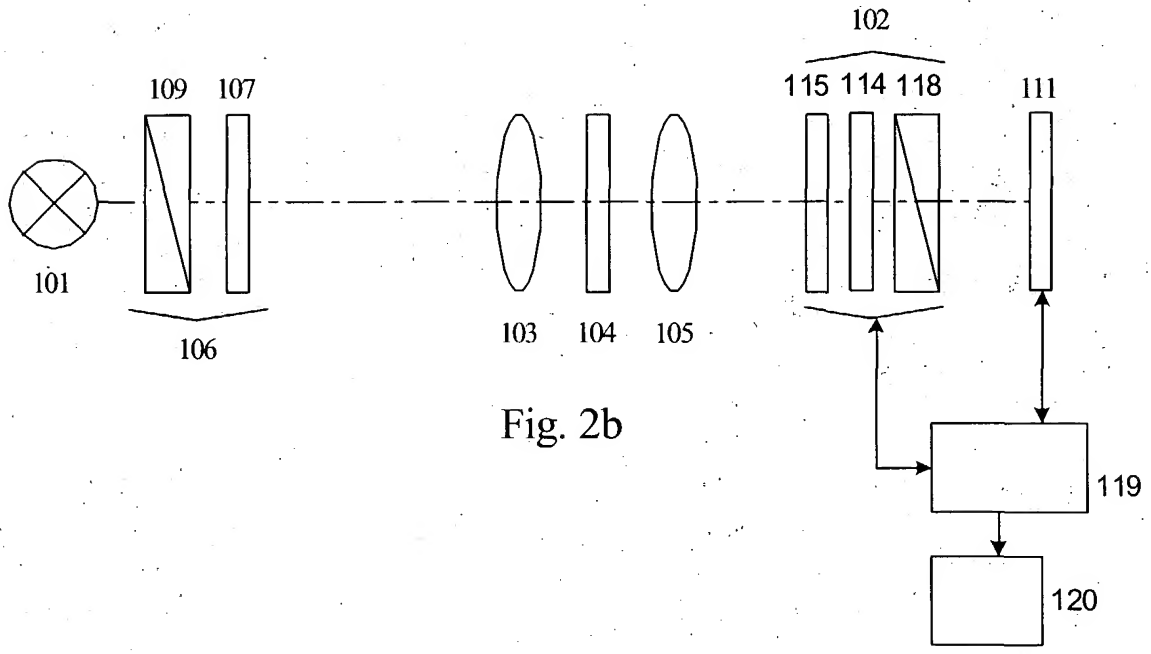
102
109 107
115 114 118
111
101
103 104 105
106
119
120

Fig. 2b

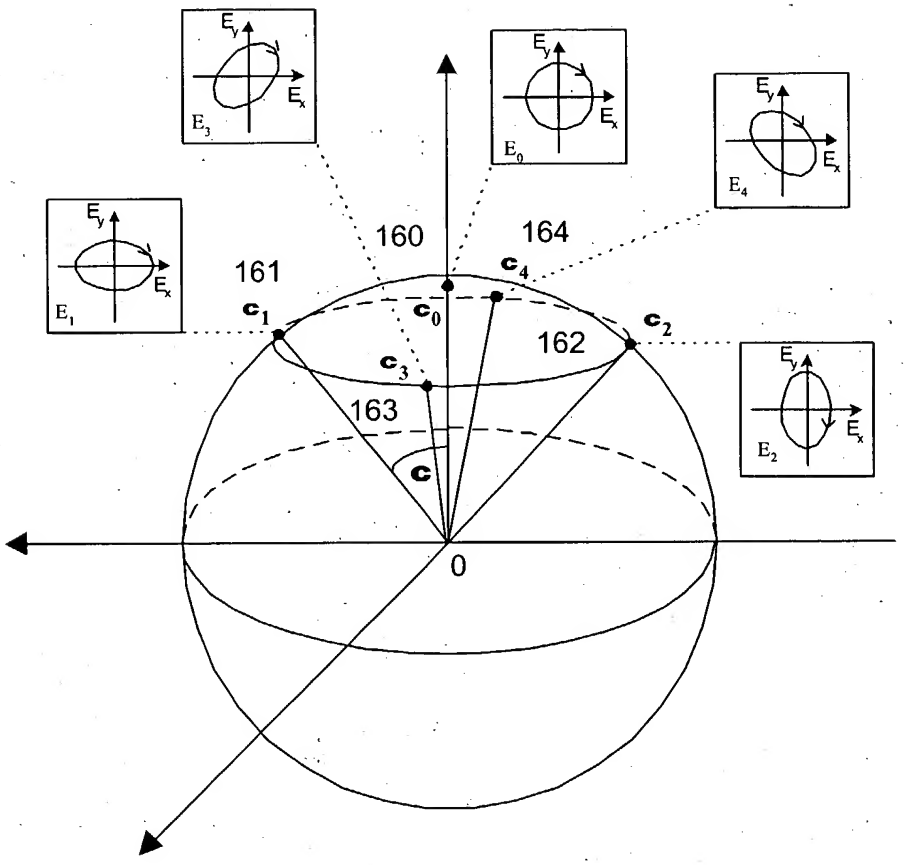

Fig. 3

Setting	Beam parameters		Retardances (Fig 1A)		Retardances (Fig 1B)	
	ε	γ	α	β	α	β
Σ_0	45°	NA	90°	180°	270°	0°
Σ_1	45°-χ/2	0°	90°-χ	180°	270°-χ	0°
Σ_2	45°-χ/2	90°	90°+χ	180°	270°+χ	0°
Σ_3	45°-χ/2	45°	90°	180°-χ	90°-χ	180°
Σ_4	45°-χ/2	135°	90°	180°+χ	90°+χ	180°

Fig. 4

N=2 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG0}}$

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG1}}$

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG3}}$

↓

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_1}$

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_3}$

↓

*COMPUTE TERMS **A** AND **B** FROM $\boldsymbol{I_1}$, $\boldsymbol{I_3}$, $\boldsymbol{I_{BG0}}$, $\boldsymbol{I_{BG1}}$, $\boldsymbol{I_{BG3}}$'*

↓

*COMPUTE RETARDANCE Δ AND AZIMUTH φ FROM **A** AND **B** AND STORE*

Fig. 5

N=3 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG1}}$

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG2}}$

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE $\boldsymbol{I_{BG3}}$

↓

COMPUTE TERMS $\boldsymbol{A_{BG}}$ AND $\boldsymbol{B_{BG}}$ FROM $\boldsymbol{I_{BG1}}$, $\boldsymbol{I_{BG2}}$, $\boldsymbol{I_{BG3}}$, AND STORE

Fig. 6

N=3 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_1

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_2

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_3

↓

*COMPUTE TERMS **A** AND **B** FROM I_1, I_2, I_3*

↓

COMPUTE CORRECTED TERMS $A'=A-A_{BG}$ AND $B'=B-B_{BG}$

↓

*COMPUTE RETARDANCE Δ AND AZIMUTH φ FROM **A'** AND **B'** AND STORE*

Fig. 7

N=4 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 */ CIRCULAR ANALYZER*

↓

CAPTURE AND STORE IMAGE I_{BG1}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 */ CIRCULAR ANALYZER*

↓

CAPTURE AND STORE IMAGE I_{BG2}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 */ CIRCULAR ANALYZER*

↓

CAPTURE AND STORE IMAGE I_{BG3}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 */ CIRCULAR ANALYZER*

↓

CAPTURE AND STORE IMAGE I_{BG4}

↓

COMPUTE TERMS A_{BG} *AND* B_{BG} *FROM* I_{BG1}, I_{BG2}, I_{BG3}, I_{BG4} *AND STORE*

Fig. 8

N=4 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_1

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_2

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_3

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_4

↓

*COMPUTE TERMS **A** AND **B** FROM I_1, I_2, I_3, I_4*

↓

COMPUTE CORRECTED TERMS $A'=A-A_{BG}$ AND $B'=B-B_{BG}$

↓

*COMPUTE RETARDANCE Δ AND AZIMUTH φ FROM **A'** AND **B'** AND STORE*

Fig. 9

N=5 ALGORITHM

TAKE BACKGROUND IMAGES, SPECIMEN OUT

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_{BG0}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_{BG1}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_{BG2}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_{BG3}

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_{BG4}

↓

COMPUTE TERMS A_{BG} AND B_{BG} FROM I_{BG0}, I_{BG1}, I_{BG2}, I_{BG3}, I_{BG4} AND STORE

Fig. 10

N=5 ALGORITHM

TAKE IMAGES WITH SPECIMEN IN

CREATE CIRCULAR SETTING OF POLARIZER Σ_0 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_0

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_1 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_1

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_2 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_2

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_3 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_3

↓

CREATE ELLIPTICAL SETTING OF POLARIZER Σ_4 / CIRCULAR ANALYZER

↓

CAPTURE AND STORE IMAGE I_4

↓

*COMPUTE TERMS **A** AND **B** FROM I_0, I_1, I_2, I_3, I_4*

↓

COMPUTE CORRECTED TERMS $A'=A-A_{BG}$ AND $B'=B-B_{BG}$

↓

*COMPUTE RETARDANCE Δ AND AZIMUTH φ FROM **A'** AND **B'** AND STORE*

Fig. 11